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#### 24. COMMON METHODS OF CATCHING AIR BREATHING FISHES IN DARBHANGA (BIHAR)

From fisheries point of view, Darbhanga is an important district of north Bihar. It lies between 85°31' and 86°44' east longitude and 25°28' and 26°40' north latitude having a waterspread area of 5,986 ha. The annual freshwater marketable surplus fish of the district has been estimated to over 10,000 tons of which live fish constitute about 28 per cent. In Bihar, seasonal supply of air-breathing fishes comes mostly from the *chaurs*, low lying fields which get inundated by the rising rivulets of the Koshi, which is not considered to be a carp bearing river (Jhingran 1974). Thus, the *chaur* fishery of Darbhanga is dominated mostly by the catfishes, and some miscellaneous varieties.

The *chaurs* surveyed during the present study are seasonal, retaining water with varying depths for 6 to 9 months. The fishes captured are brought to Supaul fish market for disposal which is an important fish assembly centre of this district, situated about 90 km south-east of Darbhanga township. The fish population in the *chaurs* are self-recruited every year through the flood waters. When the rivers recede, the *chaurs* are left with various types of fish and fish seed. The average catch composition of *chaur* fishery has been worked out as carp — 20%, catfish — 15%, air-breathing fish — 45% and miscellaneous

— 20%. Fishing in *chaurs* commences from January-February every year when the water level comes down considerably and is continued till June. In the beginning, carps dominate the catch but after March they are replaced by air-breathing and miscellaneous fishes. Fishing starts from early morning and ends by midday. The catch is brought to the assembly centre in split bamboo basket on sling. On an average 300-400 kg fish/day are assembled during December-February and 1,000-2,000 kg during March-June at Supaul market. The fishes are first graded sizewise and specieswise and then sold. The prices of *singhi* and *magur* vary between Rs. 5-7 per kg and Rs. 4-5 per kg respectively.

Although none of the following fishing methods is used exclusively for air-breathing fishes, the catch comprises a majority of these fishes.

##### *Tobacco Poisoning*

This method is used during late summer when cracks appear in the earth. The depth of individual cracks varies upto 1.5 m. In this method, fishermen put a few dry leaves (c 200 g in weight) of tobacco (*Nicotina* spp.) at the crack mouth and sprinkle water to make them wet. After 30 minutes or so, the wet leaf releases decoction of nicotine which pene-

trates into the cracks and whatever fish are in the crack come up to the surface within an hour in distress. The catch is mostly *magur* and *singhi*.

#### Cover Pot or Plunge Basket

A bell-shaped bamboo strip pot, known as '*Tapi*' is cast over the fish in muddy and shallow water areas and whatever fish is present is hand picked. *Tapi* has two openings — top and bottom. The circumferences of these openings are 70 and 20 cm respectively. Its height also varies between 40-60 cm. The gear is very much effective for small murrels but sometimes minnows are also caught.

#### Apiyar

It is a typical method for capturing air-breathing fishes from the *chaur*s and low-lying paddy fields, particularly at places where there is definite difference in the gradient of the terrain. An artificial barrier, made of earth and aquatic plants, is erected across the lower portion of the terrain with a small opening at a corner. A small circular ditch (sometimes rectangular, 60 x 60 cm), locally known as '*Apiyar*' (also referred as '*Chhoh*' or '*Deba*' according to place of operation), is dug near this opening. A bamboo screen (50 x 70 cm) is fixed vertically at the opening and water is allowed to pass from upper level to lower level. Instinctively, the fishes inhabiting the lower level side start ascending towards upper level zone. In doing so, when fishes come in contact with the split bamboo screen, they jump into the *apiyar* and get trapped. The catch mostly comprises *singhi*, *magur*, *koi*, and *murrels*.

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#### Cast Net

Locally it is known as 'phenka jal'. The net is made of either cotton (20/5/1) or synthetic twine (210/2/3). The nets are provided with peripheral pockets (*ghars*), made by folding 4-6 meshes and stiched at the intervals of 6-9 meshes. The pickets are provided with oval shaped iron sinkers, each weighing 50 g. The peripheral circumference of the net varies between 120 and 200 cm and the height between 1.5 and 2.5 m. The mesh size also varies between 5 and 12 mm. The net is either operated from the shore or from a boat to any depth of water. The catch is *koi*, *singhi*, besides other fishes.

In Darbhanga, air-breathing fishes are also caught through drag net, line fishing and various types of traps in addition to the methods given above but they are not so very common in practice.

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